

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HARRY H. LU, THOMAS E. MANLEY, and JOSEPH J. HARDING

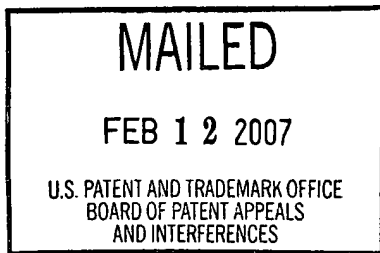
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Appeal 2006-2985  
Application 10/702,225  
Technology Center 3700

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Decided: February 12, 2007

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Before MURRIEL E. CRAWFORD, ROBERT E. NAPPI and LINDA E.  
HORNER, *Administrative Patent Judges*.  
HORNER, *Administrative Patent Judge*.

STATEMENT OF THE CASE

The Appellants seek our review of the Examiner's final rejection of claims 1, 3-9, and 23. We have jurisdiction over this appeal under 35 USC § 134(a).

## SUMMARY OF DECISION

We AFFIRM and enter a new ground of rejection pursuant to 37 C.F.R. § 41.50(b).

## THE INVENTION

The Appellants invented a system for making a coiled strip of dunnage (Specification 1: 9-10). Dunnage is protective material typically placed in a shipping container to fill any voids and/or to cushion an item during the shipping process (Specification 1: 14-17). The system of the invention uses a stapler to secure juxtaposed portions of one or more crumpled strips of dunnage, such as for securing the trailing end of a coiled strip of dunnage to the balance of the coil to prevent or inhibit unwinding of the coil (Specification 2: 8-11 and 19-20).

Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A system, comprising a dunnage supply having a converter that is operable to convert a sheet of stock material into a strip of relatively less dense dunnage, the dunnage supply having an outlet through which one or more of the strips of dunnage are supplied, a positioning device that positions in juxtaposition portions of the one or more strips of dunnage, and a stapler for connecting the juxtaposed portions to hold them together.

## THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Fuss	US 5,468,556	Nov. 21, 1995
Wischusen, III	US 5,643,647	Jul. 01, 1997
Cruz	US 6,251,054 B1	Jun. 26, 2001

The following rejections are before us for review.

1. 1, 3, and 5-7 stand rejected under 35 USC § 102(b) as being anticipated by Fuss.
2. Claims 6 and 7 stand rejected, in the alternative, under 35 USC § 103(a) as being unpatentable over Fuss.
3. Claims 4, 8, 9, and 23 stand rejected under 35 USC § 103(a) as being unpatentable over Fuss in view of Cruz or Wischusen.

### ISSUE

The Appellants contend that claims 1, 3, and 5-7 are not anticipated by Fuss, because Fuss discloses only a converter to convert a sheet of stock material into a strip of relatively less dense dunnage, and Fuss does not disclose the claimed positioning device or the claimed stapler that act on one or more strips of relatively less dense dunnage provided from the converter (Brief 7). The Appellants further contend that claims 4, 8, 9, and 23 are not obvious in view of the combined teachings of Fuss and Cruz or Wischusen, because neither Cruz nor Wischusen cures the deficiencies of Fuss (Brief 8-9).

The Examiner contends that the sheet stock material of Fuss is construed as “dunnage” before and after the stapling procedure, and as such, Fuss shows a dunnage supply having an outlet through which one or more strips of “dunnage” are supplied and formed at a station 102, wherein the strips may be bent, curled, folded, curved, and the like, so that one portion of the strip will be brought into contact with another part and attached together, such as by stapling (Answer 3, 6).

The issue before us is whether the Appellants have shown that the Examiner erred in finding that Fuss anticipates all of the elements of claim 1.

### FINDINGS OF FACT

A preponderance of the evidence establishes the following facts:

Claim 1 recites a system comprising a dunnage supply, a positioning device, and a stapler.

The claim recites that the dunnage supply has a converter that converts a sheet stock material into a strip of “relatively less dense” dunnage.

The claim recites that the positioning device and the stapler then act on the resultant strip(s) of “relatively less dense” dunnage provided from the converter to juxtapose and connect portions of the strip(s) of dunnage.

The specification describes that the dunnage converter 30 of Figure 3 converts one or more plies of sheet stock material into a crumpled strip 20 of “relatively less dense dunnage” (Specification 5: 20-22).

The specification does not otherwise use the phrase “relatively less dense” to describe the converted dunnage.

Density is calculated as mass per unit volume.

The claim language “relatively less dense” means that the converted strip of dunnage has less mass per unit volume than the starting sheet stock material.

Fuss discloses a system having a transverse die cutting station 70 that cuts the continuous sheet of material 60 into connected strips 76 (Fuss, col. 6, ll. 23-28, Figures 12-13).

Fuss discloses that each strip 76 is then engaged with a moving belt 80 having a quantity of small spikes or pins 82 which protrude from the belt into the still connected strips 76 for holding the transverse strips to the belt (Fuss, col. 6, ll. 33-36, Figures 14-15).

Fuss discloses that after the strips have been engaged to the spiked belt, the sheet moves into a slitting and edge trimming station 90 that cuts the strips 76 into shorter length strips 96 (Fuss, col. 6, l. 58 – col. 7, l. 1, Figures 16-17).

Fuss shows that the spikes or pins 82 create holes in the strips of dunnage 96 (Fuss, Figures 14, 16).

The holes in the strips of dunnage 96 result in a mass per unit volume less than the starting material 60.

Thus, Fuss discloses a system for converting a continuous strip of flat sheet material 60 into strips of “relatively less dense” dunnage material 96 (Fuss, col. 6, l. 23-col. 7, l. 1, Figures 12-17).

Fuss also discloses a forming station 102 that bends, curls, folds, and curves the strips 96 into a convoluted shape which encloses a convex region of space into which the particle can compress (Fuss, col. 7, ll. 15-21 and 32-36).

Fuss discloses that one portion of the strip can be secured to another portion of the formed strip where the portions have been brought into contact with one another by the forming operation (Fuss, col. 7, ll. 51-53).

Fuss discloses that stapling may be used to join the end surface regions of the convoluted shape (Fuss, col. 2, ll. 39-41).

Although Fuss does not explicitly disclose or show a stapler, one having ordinary skill in the art would recognize that a stapler is necessarily present based on Fuss's teaching of stapling the end surface regions.

#### PRINCIPLES OF LAW

We determine the scope of the claims in patent applications “not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (en banc) (*quoting In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004)). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”) The challenge is to interpret claims in view of the specification without unnecessarily importing limitations from the specification into the claims. *See E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003).

We remind appellants that it is their burden to precisely define the invention, not the PTO's. *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed.

Cir. 1997). Appellants always have the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Once we have determined the scope of the claims, we then examine whether the prior art anticipates the claim. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’ ‘Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

## ANALYSIS

We interpret the scope of claim 1 to require a converter to convert sheet stock material into a strip of dunnage having less mass per unit volume than the starting sheet stock material. Fuss punches holes in its starting sheet stock material which results in converted strips that have less mass per unit volume, and thus are relatively less dense than the starting material. Fuss then uses a positioning device

to position portions of these converted strips of dunnage in juxtaposition and connects the juxtaposed portions to hold them together. Fuss inherently discloses the use of a stapler as one means to connect the portions of the dunnage. As such, we find that Fuss anticipates the invention of claim 1.

### CONCLUSIONS OF LAW

We conclude that the Examiner did not err in rejecting claim 1 under 35 USC § 102(b) as being anticipated by Fuss. Inasmuch as our finding of anticipation is based on new facts and reasoning not found by the Examiner, we make this finding a new ground of rejection under 37 CFR § 41.50(b).

The Appellants did not separately argue the patentability of dependent claims 3 and 5-7. Rather, the Appellants relied on the arguments for patentability of claim 1. As such, we also sustain the Examiner's rejection of these claims.

Because we find no deficiencies in Fuss for the reasons set forth *supra*, we also sustain the Examiner's rejection of claims 4, 8, 9, and 23 under 35 USC § 103(a).

### DECISION

The decision of the Examiner to reject claims 1, 3-9, and 23 is affirmed and the Board's findings are entered as a new ground of rejection.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides, "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 C.F.R.



§ 41.50(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner....

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED; 37 CFR § 41.50(b)

**MURRIEL E. CRAWFORD**  
Administrative Patent Judge

ROBERT E. NAPPI  
Administrative Patent Judge

*Linda E. Horner*  
LINDA E. HORNER  
Administrative Patent Judge

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